



PTO/SB/08B (08-03)

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| Substitute for form 1449B/PTO   |   |    | <b>Complete if Known</b> |                        |                 |
| <b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br>(use as many sheets as necessary) |   |    | Application Number       | 10/828,846             |                 |
|   |   |    | Filing Date              | April 20, 2004         |                 |
|   |   |    | First Named Inventor     | Binder, Steven R.      |                 |
|   |   |    | Art Unit                 | 1645 1631              |                 |
|   |   |    | Examiner Name            | Whaley                 |                 |
| Sheet   | 3 | of | 5                        | Attorney Docket Number | 02558B-063710US |

| U.S. PATENT DOCUMENTS+ |                          |   |                                |  |   |
|------------------------|--------------------------|---|--------------------------------|--|---|
| Examiner<br>Initials*  | Cite<br>No. <sup>1</sup> | Document Number<br>Number Kind Code <sup>2</sup> (if known) | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
| PW                     | AA                       | US-8,024,705  | 02-15-2000                     | Schlager et al.                                    |   |
| I                      | AB                       | US 6,031,232  | 02-29-2000                     | Cohenford et al.                                   |   |
|                        | AC                       | US 5,874,688  | 10-07-1997                     | Kauvar et al.                                      |   |
|                        | AD                       | US-   |                                |  |   |

| FOREIGN PATENT DOCUMENTS |                       |                           |                     |                                   |                             |   |   |                          |
|--------------------------|-----------------------|---------------------------|---------------------|-----------------------------------|-----------------------------|---|---|--------------------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document   |                     |                                   | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T <sup>3</sup>           |
|                          |                       | Country Code <sup>2</sup> | Number <sup>4</sup> | Kind Code <sup>5</sup> (if known) |                             |   |   |                          |
| PW                       | AE                    | PCT                       | WO 96/12187         | A1                                | 4-25-1996                   |   |   | <input type="checkbox"/> |
|                          | AF                    |                           |                     |                                   |                             |   |   | <input type="checkbox"/> |

| NON PATENT LITERATURE DOCUMENTS |                       |  |  |  |                |
|---------------------------------|-----------------------|--|--|--|----------------|
| Examiner Initials *             | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.  |  |  | T <sup>2</sup> |
| PW                              | AG                    | ASSADI, A. "A basic introduction to pattern recognition," at << <a href="http://www.lcmg.wisc.edu/bioCVG/courses/math991-f2001/courseware/patternRecog_Intro_Reading.pdf">http://www.lcmg.wisc.edu/bioCVG/courses/math991-f2001/courseware/patternRecog_Intro_Reading.pdf</a> >> visited on September 24, 2002.                  |  |  |                |
|                                 | AH                    | BEGLEY, R.J. et al. "Adding intelligence to medical devices," Medical Device & Diagnostic Industry March 2000, pp. 150-173.  |  |  |                |
|                                 | AI                    | BOYD, J.C. et al. "Effect of atypical antibiotic resistance on microorganism identification by pattern recognition," J. of Clinical Microbiology December 1978, pp. 689-694, Vol. 8, No. 6.  |  |  |                |
|                                 | AJ                    | CABELLO, D. et al. "Fuzzy K-nearest neighbor classifiers for ventricular arrhythmia detection," Int. J. Biomed. Comput. 1991, pp. 77-93, Vol. 27.  |  |  |                |
|                                 | AK                    | CASTELLI, V. and BRODIE, M. "EE 6880 special topics in signal processing statistical pattern recognition," at << <a href="http://www.ee.columbia.edu/academics/CastelBrodiecourse%20description.pdf">http://www.ee.columbia.edu/academics/CastelBrodiecourse description.pdf</a> >> visited on September 24, 2002, 1 page total. |  |  |                |
|                                 | AL                    | DeJESUS, E.X. "Tech Update-Achieving expert ease: expert systems can speed work, answer questions and offer guidance in all areas of healthcare," Healthcare Informatics January 2000, pp. 55-60.  |  |  |                |
|                                 | AM                    | ESSEX, D. "Artificial Intelligence-Long-awaited technology eases into healthcare, may stimulate e-business," Healthcare Informatics February 2000, pp. 74-78.  |  |  |                |
|                                 | AN                    | GLICKMAN, S.E. et al. Rapid identification of mycolic acid patterns of mycobacteria by high-performance liquid chromatography using pattern recognition software and a mycobacterium library," J. of Clin. Microbiology March 1994, pp. 740-745, Vol. 32, No. 3.   |  |  |                |
|                                 | AO                    | GRAFENSTEIN, H.V. "Phar 441 immunology: lecture 10-autoimmune diseases," Autoimmune diseases at << <a href="http://www.fst.usc.edu/~grafen/teaching/lectures8.htm">http://www.fst.usc.edu/~grafen/teaching/lectures8.htm</a> >> visited on August 28, 2000, 9 pages total.   |  |  |                |

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|-----------------------|--|--------------------|---------|
| Examiner<br>Signature |  | Date<br>Considered | 2/14/06 |
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|   |                        | First Named Inventor     | Binder, Steven R. |
|   |                        | Art Unit                 | 1645 1631         |
|   |                        | Examiner Name            | whaley            |
| Sheet 4 of 5  | Attorney Docket Number | 02558B-063710US          |                   |

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| PV                              | AP                    | HUANG, H. and ANTONELLI, P. "Application of principal component analysis to high-resolution infrared measurement compression and retrieval," J. of Applied Meteorology March 2001, pp. 365-388, Vol. 40.  |                |
|                                 | AQ                    | VANDIC, M. et al. "The use of knowledge-based systems to improve medical knowledge about urine analysis," Clinica Chimica Acta 2000, pp. 251-260, Vol. 297.   |                |
|                                 | AR                    | MELLORS, R.C. "Immunopathology," at <<http://edcenter.med.cornell.edu/CUMC_PathNotes/Immunopathology/Immunopathology.html>> visited on September 28, 2000, 42 pages total.  |                |
|                                 | AS                    | MOENS, H.J.B. and Van der KORST, J.K. "Computer-assisted diagnosis of rheumatic disorders," Seminars in Arthritis and Rheumatism December 1991, pp. 156-169, Vol. 21, No. 3.  |                |
|                                 | AT                    | NIAID publications "Understanding autoimmune disease-how are autoimmune diseases treated?" at <<http://www.niaid.nih.gov/publications/autoimmune/treated.htm>> visited on August 28, 2000, 2 pages total.   |                |
|                                 | AU                    | NIAID publications "Understanding autoimmune disease-how are autoimmune diseases diagnosed?" at <<http://www.niaid.nih.gov/publications/autoimmune/diagnosed.htm>> visited on August 28, 2000, 1 page total.  |                |
|                                 | AV                    | NIAID publications "Understanding autoimmune disease-how does the immune system work?" at <<http://www.niaid.nih.gov/publications/autoimmune/work.htm>> visited on August 28, 2000, 6 pages total.  |                |
|                                 | AW                    | NIAID publications "Understanding autoimmune disease-what are autoimmune diseases?" at <<http://www.niaid.nih.gov/publications/autoimmune/what.htm>> visited on August 28, 2000, 1 page total.  |                |
|                                 | AX                    | NIAID publications "Understanding autoimmune disease-what are some examples of autoimmune diseases?" at <<http://www.niaid.nih.gov/publications/autoimmune/examples.htm>> visited on August 28, 2000, 4 pages total.  |                |
|                                 | AY                    | NIAID publications "Understanding autoimmune disease-what are the causes of autoimmune diseases?" at <<http://www.niaid.nih.gov/publications/autoimmune/causes.htm>> visited on August 28, 2000, 2 pages total.   |                |
|                                 | AZ                    | NIAID publications "Understanding autoimmune disease-who is affected by autoimmune diseases?" at <<http://www.niaid.nih.gov/publications/autoimmune/who.htm>> visited on August 28, 2000, 1 page total.   |                |
|                                 | AAA                   | Principal component analysis "Principal component analysis," at <<http://www.cls.hut.fi/~aapo/papers/NCS99web/node5.html>> visited on September 24, 2002, 2 pages total.  |                |
|                                 | ABB                   | SMITH, B.J. and McNEELY, M.D.D. "The influence of an expert system for test ordering and interpretation on laboratory investigations," Clinical Chem. 1999, pp. 1168-1175, Vol. 45, No. 8.  |                |
|                                 | ACC                   | TOBIN, K.W. et al. "Adaption of the fuzzy k-nearest neighbor classifier for manufacturing automation," at http://www-ismv.ic.ornl.gov/publications/kwt_sple98.pdf>> visited on September 24, 2002.  |                |
|                                 | ADD                   | TRENDELENBURG, C. et al. "Knowledge-based test result interpretation in laboratory medicine," Clinica Chimica Acta 1998, pp. 229-242, Vol. 278.   |                |
|                                 | AEE                   | Van OUYEN, A. "Theoretical aspects of pattern analysis: a simple introduction to principal component and cluster analysis," at <<http://www.anc.ed.ac.uk/~arjen/papers/cluster_abstract.html>> visited on September 24, 2002, 2 pages total.                    |                |

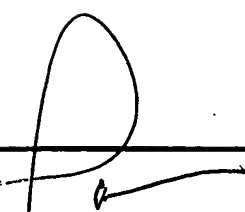
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| Examiner Signature |  | Date Considered | 2/14/06 |
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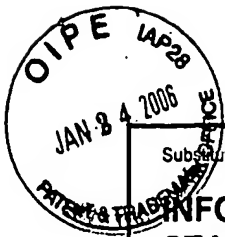
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|   |   | Filing Date              | April 20, 2004       |
|   |   | First Named Inventor     | Binder, Steven R.    |
|   |   | Art Unit                 | <del>1645</del> 1631 |
|   |   | Examiner Name            |                      |
| Sheet   | 5 | of                       | 5                    |
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| PW                              | AFF                      | PETROVEYKI, M. et al. "An algorithm for leukaemia immunophenotype pattern recognition," Med. Inform. 1993, pp. 11-21, Vol. 18, No. 1.   |                |
| PW                              | AGG                      | THOMPSON, D. et al. "The clinical significance of autoantibody profiles in patients with systemic lupus erythematosus," Lupus 1993, pp. 15-19, Vol. 2.  |                |
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|   |                        | Art Unit                 | 1645 1631         |
|   |                        | Examiner Name            | Pablo S. Whaley   |
| Sheet 1 of 1  | Attorney Docket Number | 02558B-063710US          |                   |

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| PW                     | 1                     | US-5,293,454  | 03-08-1994                     | Kamiya   |   |

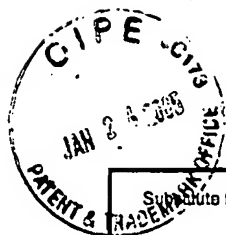
| FOREIGN PATENT DOCUMENTS |                       |                           |                     |                                   |                                |  |  |                          |
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| PW                       | 2                     | JP                        | 11-504739           | A                                 | 04-27-1999                     | Horus Therapeutics, Inc.                           |  | <input type="checkbox"/> |
|                          | 3                     | WO                        | 97/05553            | A1                                | 02-13-1997                     | Horus Therapeutics, Inc.                           |  | <input type="checkbox"/> |
|                          | 4                     | JP                        | 06-509865           | A                                 | 11-02-1994                     | Terrapin Technologies Inc.                         |  | <input type="checkbox"/> |
|                          | 5                     | WO                        | 92/17784            | A1                                | 10-15-1992                     | Terrapin Technologies Inc.                         |  | <input type="checkbox"/> |
|                          | 6                     | JP                        | 2-235170            |                                   |                                | Kokai  |  | <input type="checkbox"/> |
|                          | 7                     | JP                        | 200-172671          |                                   |                                | Kokai  |  | <input type="checkbox"/> |

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| PW                              | 8                     | GRUS et al., "Identification and Classification of an Autoantibody Repertoires (Western Blots) with a Pattern Recognition Algorithm by an Artificial Neural Network," Electrophoresis, Vol. 18, No. 7 (1997) p. 1120-1125                                       |                |

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PTO:SB-08A (08-03)

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|   |   | Examiner Name            | <del>Allen, Marianne P.</del> P. WHALEY |                        |                 |
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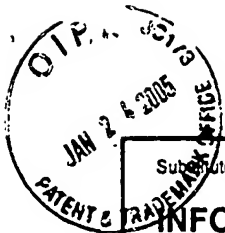
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| I                        | 3.                       | JP                        | 06-509865           | A                                 | 11-02-1994                     | Terrapin<br>Technologies Inc.                         |  | <input checked="" type="checkbox"/> |
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|   |   | Art Unit                 | 1631                                |                        |                 |
|   |   | Examiner Name            | Allen, Marianne P. <b>P. WNALEY</b> |                        |                 |
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| <b>PW</b>                       | 5.                       | GRUS, F. and ZIMMERMANN, C., "Identification and classification of autoantibody repertoires (western blots) with a pattern recognition algorithm by an artificial neural network" Electrophoresis 18:1120-1125 (1997)   |                |
|                                 |                          |   |                |

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